

Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures

SOUTHERN GULF ST VINCENT ISRA

Australia and Southeast Indian Ocean Region

SUMMARY

Southern Gulf St Vincent is located in South Australia, Australia. The area is characterised by sand substrates, seagrass, rocky reefs, and high macroalgae coverage. This area overlaps with two protected areas. Within this area there are: **threatened species** (Coastal Stingaree *Urolophus orarius*); and **range-restricted species** (e.g., Pygmy Thornback Skate *Dentiraja flindersi*).

CRITERIA

Criterion A - Vulnerability; Criterion B - Range Restricted

— —
AUSTRALIA
 — —
0-40 metres
 — —
3,670.8 km²
 — —





DESCRIPTION OF HABITAT

Southern Gulf St Vincent is located in South Australia, Australia. The area is characterised by sand substrates, seagrass (e.g., *Posidonia*, *Zosteraceae*, *Amphibolis* spp.), rocky reefs, and high macroalgae coverage (Edyvane 1999).

The area is influenced by the dynamics of the Gulf St Vincent, which is a shallow gulf environment (maximum depth ~40 m) that supports an abundance of tidal wetlands, seagrass meadows, mangroves, rocky reefs, and saltmarshes (Edyvane 1999). This is an estuary system with water transported into the gulf via Investigator Strait and Backstairs Passage, but Kangaroo Island blocks most of the gulf mouth from the open ocean, limiting water exchange and sheltering the gulf from high wave energy (Tanner 2002).

The area overlaps with Lower Yorke Peninsula Marine Park and Encounter Marine Park (NPWS SA 2025).

This Important Shark and Ray Area is benthic and is delineated from inshore and surface waters (0 m) to 40 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Endangered Coastal Stingaree (Kyne et al. 2019).

CRITERION B - RANGE RESTRICTED

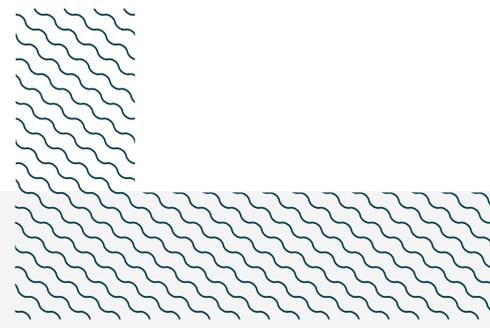
This area holds the regular presence of Pygmy Thornback Skate, Western Shovelnose Stingaree, and Coastal Stingaree as resident range-restricted species. Based on fishing surveys and citizen science records, these species regularly occur in the area (ALA 2025a, 2025b; iNaturalist 2025a, 2025b, 2025c).

Historical records found in the Atlas of Living Australia show that 63 Pygmy Thornback Skate were observed between 1981-2025 across Australia (ALA 2025a). Of these records, the majority (n = 39, 67.2%) were from this area and were observed during trawl fishing surveys conducted between May and December 2006-2009 (ALA 2025a). Contemporary citizen science records show that this species still occurs in the area (iNaturalist 2025a). Four observations for the species have been reported in iNaturalist for Australia, all from 2025. Of these, three were recorded in South Gulf St Vincent highlighting the importance of the area for this data poor species (iNaturalist 2025a). Pygmy Thornback Skates occur only in South Australia, and the distribution of this species is mainly restricted to the Gulf St Vincent, Spencer Gulf, and surrounding areas (Finucci & Armstrong 2025). This species is restricted to the South West Australian Shelf Large Marine Ecosystem (LME).

Citizen science records show that Western Shovelnose Stingaree regularly occurs in the area (iNaturalist 2025b). Of 65 observations recorded in iNaturalist for South Australia, 26 (46.4%) were from this area. Individuals in this area were observed between 2009-2025, with the majority (n = 24; 92%) recorded after 2020. This area has the largest number of individuals recorded across South Australia (iNaturalist 2025b). This species occurs in the South West Australian Shelf and the West Central Australian Shelf LMEs.



Historical records examined in the Atlas of Living Australia show that 20 Coastal Stingarees were observed between 1978–2009 across Australia (ALA 2025b). Of these records, the majority (n = 11, 55%) were from this area and were recorded from photographic observations and from catches in benthic trawlers that were deposited in fish collections. Contemporary citizen science records show that this area holds the largest number of individuals for this species recorded across all of Australia (iNaturalist 2025c). Of 19 observations recorded between 2011–2025 for Australia, nine (47%) were from this area (iNaturalist 2025c). This area has been highlighted as one of the most important habitats for the species (Daley & Hyde 2023). The Coastal Stingaree occurs primarily in the South West Australian Shelf LME and marginally in the Southeast Australian Shelf LME.



Acknowledgments

Ciaran A Hyde (University of the Sunshine Coast), Ross K Daley (Horizon Consultancy), Charlie Huveneers (Flinders University), Janine Baker (Independent Researcher), and Emiliano García-Rodríguez (IUCN SSC Shark Specialist Group - ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2025 ISRA Region 08 - Australia and Southeast Indian Ocean workshop for their contributions to this process.

We acknowledge the Traditional Owners of Country throughout Australia and recognise the continuing connection to land, waters, and culture. We pay our respects to Elders past, present, and emerging.

This factsheet has undergone review by the ISRA Independent Review Panel prior to its publication.

This project was funded by the Shark Conservation Fund, a philanthropic collaborative pooling expertise and resources to meet the threats facing the world's sharks and rays. The Shark Conservation Fund is a project of Rockefeller Philanthropy Advisors.

Suggested citation

IUCN SSC Shark Specialist Group. 2025. Southern Gulf St Vincent ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met									
				A	B	C1	C2	C3	C4	C5	D1	D2	
RAYs													
<i>Dentiraja flindersi</i>	Pygmy Thornback Skate	DD	27-54		X								
<i>Trygonoptera mucosa</i>	Western Shovelnose Stingaree	LC	0-95		X								
<i>Urolophus orarius</i>	Coastal Stingaree	EN	5-50	X	X								

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Asymbolus vincenti</i>	Gulf Catshark	LC
<i>Heterodontus portusjacksoni</i>	Port Jackson Shark	LC
<i>Orectolobus halei</i>	Banded Wobbegong	LC
<i>Sutorectus tentaculatus</i>	Cobbler Wobbegong	LC
RAYS		
<i>Aptychotrema vincentiana</i>	Western Shovelnose Ray	LC
<i>Hypnos monoptyerygius</i>	Coffin Ray	LC
<i>Trygonorrhina dumerilii</i>	Southern Fiddler Ray	LC
<i>Urolophus gigas</i>	Spotted Stingaree	LC

IUCN Red List of Threatened Species Categories are available by searching species names at www.iucnredlist.org Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.





REFERENCES

- Atlas of Living Australia (ALA). 2025a.** Occurrence records for *Dentiraja flindersi*. Available at: <https://doi.org/10.26197/ala.fcc47cc4-d025-460a-9235-a013acbeace2> Accessed October 2025.
- Atlas of Living Australia (ALA). 2025b.** Occurrence records for *Urolophus orarius*. Available at: <https://doi.org/10.26197/ala.b6f387b1-eb24-46cb-b2b6-6751d87228db> Accessed October 2025.
- Daley R, Hyde C. 2023.** Fishery and spatial management solutions to inform the protection and recovery of Australia's threatened endemic elasmobranchs. Brisbane: Australian Marine Conservation Society & Humane Society International.
- Edyvane KS. 1999.** Coastal and marine wetlands in Gulf St. Vincent, South Australia: understanding their loss and degradation. *Wetlands Ecology and Management* 7: 83-104. <https://doi.org/10.1023/A:1008481228129>
- Finucci B, Armstrong AO. 2025.** *Dentiraja flindersi*. *The IUCN Red List of Threatened Species* 2025: e.T195443A124543218.
- iNaturalist. 2025a.** Observations of *Dentiraja flindersi* in Australia. Available at: https://inaturalist.ala.org.au/observations?place_id=6744&subview=map&taxon_id=192726 Accessed September 2025.
- iNaturalist. 2025b.** Observations of *Trygonoptera mucosa* in Australia. Available at: https://inaturalist.ala.org.au/observations?subview=map&taxon_id=114623 Accessed September 2025.
- iNaturalist. 2025c.** Observations of *Urolophus orarius* in Australia. Available at: https://inaturalist.ala.org.au/observations?taxon_id=114801 Accessed September 2025.
- Kyne PM, Last PR, Marshall LJ. 2019.** *Urolophus orarius*. *The IUCN Red List of Threatened Species* 2019: e.T60100A68649829. <https://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T60100A68649829.en>
- National Parks and Wildlife Service South Australia (NPWS SA). 2025.** Marine parks. Available at: <https://www.marineparks.sa.gov.au/> Accessed September 2025.
- Tanner JE. 2002.** Three decades of habitat change in Gulf St. Vincent, South Australia. In: Tanner JE, ed. Habitat modification and its influence on prawn and crab fisheries. Project No. 98/208. Adelaide: Fisheries Research and Development Corporation/South Australian Research and Development Institute Aquatic Sciences, 199-213.